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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|---------------------------------|----------------------|---------------------|------------------|
| 10/597,834 | 10/13/2006 | Jacques Le Gars | 28944/40182 | 6863 |
| | 7590 08/10/200 & FRANK LLP | EXAMINER | | |
| 311 S. WACKER DRIVE | | | ZANELLI, MICHAEL J | |
| SUITE 2500 CHICAGO, IL 60606 | | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|---|---|---|--|--|--|--|
| | 10/597,834 | LE GARS ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Michael J. Zanelli | 3661 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | lely filed the mailing date of this communication. (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| Responsive to communication(s) filed on <u>25 Oct</u> This action is FINAL . 2b) ☑ This Since this application is in condition for allowar closed in accordance with the practice under E | action is non-final. nce except for formal matters, pro | | | | | |
| Disposition of Claims | | | | | | |
| 4) ☐ Claim(s) 1-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-9,14,15 and 17-28 is/are rejected. 7) ☐ Claim(s) 10-13 and 16 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 25 October 2006 is/are: Applicant may not request that any objection to the ore Replacement drawing sheet(s) including the correction. | vn from consideration. r election requirement. r. a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 11/27/06. | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | | | | |

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DETAILED ACTION

1. This application has been examined. The preliminary amendment filed 10/25/06 has been entered. Claims 1-28 are pending.

- 2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
- 3. The IDS filed 11/27/06 has been considered.
- 4. Claims 1-28 are objected to because of the following informalities:
 - A. As per claims 1, 4, 5, 8, 10, 11 and 13-24, the phrase "is designed to" does not positively recite the structure and corresponding function thereof which defines the claimed invention. The examiners suggests using the phrase --is configured to-- (each occurrence).
 - B. All claims depending from an objected base claim are also objected to as containing the same deficiencies.
- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 23-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - A. As per claim 23, the claim is unclear as to whether the infrastructure recited at line 8 is the same infrastructure recited at line 6 or represents additional infrastructure.

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B. As per claim 24, the claim is unclear at lines 2 and 7 as to which infrastructure is being referred to (see lines 6 and 8 of claim 23).

- C. As per claim 28, the claim is unclear at line 2 as to which infrastructure is being referred to (see lines 6 and 8 of claim 23). Also "the second communication interfaces" lacks antecedence (see claim 24).
- D. All claims depending from a rejected base claim are also rejected as containing the same deficiencies.
- 7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 8. Claims 1-3, 14, 15 and 17-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Acres (2004/0189722; Prov. 60/458,473).
 - A. As per claims 1 and 23, Acres discloses a bicycle (Fig. 1) comprising an onboard control system (Figs. 2-4), various control elements (46, 48, 26, 34, etc.) and one or more communication interfaces [0082, 0108, 0111]. The control system controls and monitors various control elements including at least a security system which monitors motion sensors and communicates to external infrastructure the status of the security system [0077-0082]. With regards to claim 23, reference to an "automatic bicycle rental system" is interpreted as an

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intended use of the bicycle as defined in claim 1 and is given little patentable weight. Since Acres describes an embodiment in which only authorized users are permitted to operate the bicycle [0080], the bicycle has the capability of being used in a rental environment.

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- B. As per claims 2 and 3, as above whereby the bicycle may utilize various types of wireless communication to communicate information between the bicycle control system and external infrastructure [0082, 0108, 0111].
- C. As per claim 14, as above whereby the bicycle further includes front and rear lighting (Fig. 2:26, 46) and power control and monitoring devices (Fig. 3:114; Fig. 4:140, 142) which may include a battery and dynamo [0023-0025]. The control system controls the front and rear lighting and also detects when the bicycle is not moving for an interval of time and cuts off power to the lights to conserve power [0028-0029].
- D. As per claim 15, as above whereby the bicycle further includes a security system which receives an identification code from a communication device and compares the received code to a stored list of authorized users of the bicycle. If the bicycle is operated (moved) and the proper code has not been received, then an alarm is triggered [0077-0082].
- E. As per claim 17, as above whereby various alarm functions may be set by the user, including at least one function based on a time parameter [0083].

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F. As per claims 18-20, as above whereby unauthorized motion of the bicycle may be detected using motion detectors and an alarm triggered via sound and/or operation of the bicycle lights [0078].

- G. As per claims 21 and 22, as above whereby the bicycle may be placed in a lock condition by an authorized user having an electronic security key which may be read by a device on the bicycle [0079-0082]. When the authorized user locks the bicycle, the alarm is activated and a locking mechanism engaged (i.e., magnetic wheel brakes [0100]). The security system provides activation confirmation via the alarm system output [0081].
- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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10. Claims 1-6 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al. (5,058,044) in view of Yui et al. (2002/0174077) and Isaac (WO 03/071493).

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- A. As per claims 1 and 23, Stewart discloses a system which enables a vehicle onboard control system to control and monitor various functional elements and to communicate the status of the functional elements to external infrastructure via a communication interface (Figs. 1 and 2). Stewart is specifically directed to engine powered vehicles in a rental car business. The claim essentially differs only in the fact that the vehicle is a bicycle. However, one of ordinary skill in the art would have found it obvious to apply the basic teachings of Stewart to other types of vehicles for which the status of onboard systems are of a particular concern in a given environment (i.e., rental business). Yui (Figs. 1, 8) and Isaac (Figs. 1, 3) are cited as evidence that one of ordinary skill in the art would have considered technology found in motor vehicle rentals applicable to non-motor vehicle rentals whereby the particular functional elements controlled and monitored would have been a function of the particular vehicle concerned.
- B. As per claims 2-6, as above Stewart discloses using short-range wireless communications to communicate information from the vehicle to the external infrastructure whereby at least a failure in the vehicle's light systems may be communicated (col. 1:29-35; col. 2:3-31).

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11. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al. in view of Bruwer (WO 02/39787).

As per claims 7-9, Stewart is applied as above whereby failures in the vehicle (bicycle) lighting systems may be detected and communicated to the external infrastructure. Claims 7-9 are directed to essentially a back-up system for a rear (brake) light upon detection of a failure of the primary light. However, it was known in the vehicle arts to provide a secondary light system when a failure is detected in the primary system. For example, Bruwer discloses a means of detecting a failure of a primary light source and switching over to a secondary light source (Abs). As noted by Bruwer on pages 1-2, application to vehicle rear lighting is of particular concern since the driver would probably be unaware of the light failure and could thus lead to unsafe driving conditions. One of ordinary skill in the art would have found it obvious to include such circuitry in any vehicle as a general rule since it would have provided a safe driving condition even when a primary rear (brake) light has failed.

- 12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (571) 272-6969. The examiner can normally be reached on Monday-Thursday 9:00 AM 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J. Zanelli/ Primary Examiner Art Unit 3661